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| 10/659,484 | 09/10/2003 | Mark Stuart Day | CIS03-36(7467) | 3423 |

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| EXAMINER |
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PATHAK, SUDHANSHU C

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| ART UNIT | PAPER NUMBER |
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2611

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07/11/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

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|------------------------------|---------------------------------|----------------------------------|--|
| Office Action Summary | Application No. 10/659,484 | Applicant(s) DAY, MARK STUART | |
| | Examiner Sudhanshu C. Pathak | Art Unit 2611 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on Sept. 10th, 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-32 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,2,5-10 and 13-119 is/are rejected.
- 7) ☒ Claim(s) 3,4,11,12,20,26 and 27 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on Sept. 10th, 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Claims 1-32 are pending in the application.

Claim Rejections - 35 USC § 101

2. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

3. Claims 17 & 31 are rejected under 35 U.S.C. 101.

In regards to Claims 17 & 31, Claims 17 & 31 merely discloses a computer program (functional descriptive steps), producing no practical application, and do not define any structural and functional interrelationship between the computer programs and other claimed elements of a computer which permit the computer program functionality to be realized, thereby producing no tangible, concrete and useful results. (See Pages 52-54 of the Interim Guidelines). A suggested amendment to the claim to overcome the rejection is "A computer readable medium encoded with a computer program...."

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 1-2, 5, 7-10, 13, 15-19, 21, 23-25 & 29-32 are rejected under 35 U.S.C. 102(b) as being anticipated by Shawcross (WO 01/91397 A2).

In regards to Claims 1, 9, 17-19, 25 & 31-32 Shawcross discloses in a transmitter device of a content distribution system (Fig.'s 1, 6-8), a method for transmitting content comprising: detecting a plurality of multicast channels for transmission of the content to a receiver device (Fig.'s 7-8 & Specification, Page 6, lines 18-23 & Specification, Page 9, lines 14-21); assigning portions of the content to respective multicast channels of the plurality of multicast channels for distribution to the receiver device and transmitting the portions of the content to the receiver device using the respective assigned multicast channels (Specification, Page 11, lines 3-25) {Interpretation: The reference discloses a plurality of multicast channels (addresses) which are varied during the transmission of packets wherein portions of the content are assigned to a particular address depending on the duration time for each address}. Shawcross further discloses a computerized device comprising a communications interface (Specification, Page 9, lines 14-24); a controller (Fig. 1, element 102); and an interconnection coupling at least one communications interface and the controller (Fig. 1, elements 102, 108). Shawcross further discloses implementing the method on a computer in software (Specification, Page 30, lines 21-31 & Specification, Page 31, lines 10-15). Shawcross further discloses a receiver device detecting a plurality of multicast channels for reception from a transmitter device (Abstract, lines 22-25 & Fig. 1, element 100).

In regards to Claims 2 & 10 Shawcross discloses in a transmitter device of a content distribution system a method for transmitting content as described above. Shawcross further discloses assigning a noise element to at least one of the

multicast channels; and transmitting the noise element using the assigned multicast channel (Specification, Page 30, lines 6-8) {Interpretation: The reference discloses transmitting null data, which is interpreted as a noise element}.

In regards to Claims 5, 13 & 21 Shawcross discloses in a transmitter device of a content distribution system a method for transmitting content as described above.

Shawcross further discloses detecting a time duration associated with a first multicast channel of the plurality of multicast channels, wherein the steps of assigning and transmitting comprise transmitting a first portion of the content to the receiver device during the time duration using a first multicast channel, and further comprising: detecting expiration of the time duration associated with the first multicast channel; switching to a second multicast channel in response to detecting expiration of the time duration; and transmitting a second portion of the content to the receiver device using the respective second multicast channel (Specification, Page 11, lines 3-31) {Interpretation: The reference discloses address (channel) hopping wherein the specified addresses are for a particular duration and are selectively varied}.

In regards to Claims 7, 15, 23 & 29 Shawcross discloses in a transmitter device of a content distribution system a method for transmitting content as described above. Shawcross further discloses the step of assigning comprises, based upon a content spreading characteristic, assigning portions of the content to the respective multicast channels of the plurality of multicast channels for distribution to the receiver device, the content spreading characteristic indicating a division of the

content into the respective portions of the content; and the step of transmitting comprises substantially simultaneously transmitting the portions of the content to the receiver device using the respective assigned multicast channels (Specification, Page 10, lines 6-19 & Specification, Page 11, lines 22-25 & Claim 15 & Specification, Page 28, lines 16-30 & Fig. 8, elements 808, 810).

In regards to Claims 8, 16, 24 & 30 Shawcross discloses in a transmitter device of a content distribution system a method for transmitting content as described above. Shawcross further discloses the step of detecting comprises detecting a plurality of multicast channels, each of the plurality of multicast channels formed along a distinct communication path within the content distribution system (Fig. 7, elements 702-706).

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 6, 14, 22 & 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shawcross (WO 01/91397 A2) in view of Shannon (6,233,618).

In regards to Claims 6, 14, 22 & 28 Shawcross discloses in a transmitter device of a content distribution system a method for transmitting content as described above. However, Shawcross does not explicitly disclose prior to transmitting the portions of the content to the receiver device using the respective assigned multicast

channels, transmitting a first authorization value to the receiver device using the respective assigned multicast channels to indicate a start of transmission from and an identity of the transmitter device; and after completing transmission of the portions of the content to the receiver device using the respective assigned multicast channels, transmitting a second authorization value to the receiver device using the respective assigned multicast channels to indicate an end to the transmission from and the identity of the transmitter device.

Shannon discloses transmitting multicast channels (Column 10, lines 40-45). Shannon further discloses prior to transmitting the portions of the content to the receiver device using the respective assigned multicast channels, transmitting a first authorization value to the receiver device using the respective assigned multicast channels to indicate a start of transmission from and an identity of the transmitter device (Column 13, lines 1-10 & Fig. 3, element 301); and after completing transmission of the portions of the content to the receiver device using the respective assigned multicast channels, transmitting a second authorization value to the receiver device using the respective assigned multicast channels to indicate an end to the transmission from and the identity of the transmitter device (Column 13, lines 1-10 & Fig. 3, element 305). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention that Shannon discloses prior to transmitting the portions of the content to the receiver device using the respective assigned multicast channels, transmitting a first authorization value to the receiver device using the respective assigned multicast channels to indicate a start of

transmission from and an identity of the transmitter device; and after completing transmission of the portions of the content to the receiver device using the respective assigned multicast channels, transmitting a second authorization value to the receiver device using the respective assigned multicast channels to indicate an end to the transmission from and the identity of the transmitter device and this is implemented as described in Shawcross so as to be able to inform the receiver the beginning and end of a packet thus improving the reliability of the communications system.

Allowable Subject Matter

8. Claims 3-4, 11-12, 20 & 26-27 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

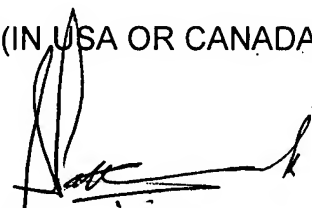
Conclusion

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure, it is recommended to the applicant to amend all the claims so as to be patentable over the cited prior art of record. A detailed list of pertinent references is included with this Office Action (See Attached "Notice of References Cited" (PTO-892)).
10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sudhanshu C. Pathak whose telephone number is (571)-272-3038. The examiner can normally be reached on M-F: 9am-6pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chieh M. Fan can be reached on (571)-272-3042.

The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Sudhanshu C. Pathak
Examiner
Art Unit 2611